

1. A disposable netting assembly for capturing trash or floatable debris comprising:
a knitted mesh net having a mouth at one end surrounded by a rim;
a frame;
the net being secured around its mouth to the frame; and

5 means for enhancing the strength of the trap selected from the group consisting of:

1) the net being formed of an inner layer and an outer layer, each layer being formed
of a mesh having openings therein, the openings of the inner layer being substantially
larger than the openings of the outer layer,

2) the frame has at least one clamping element and a plurality of projections
10 extending either from the frame or the clamping element, the net being secured to the
frame with the rim thereof extending over the projections between the clamping element
and the frame and around the upstream side of the frame; and

3) the net being formed of a high strength and high stretch yarn, with rolled, sewn
or reinforced seams.

2. The apparatus of claim 1 wherein:

the frame having an upstream side and a downstream side, an inside and an outside, and being formed of four members including a top member, a bottom member and two side members, the outside of the side members being tapered inwardly front-to-back and the upstream-downstream sides converging from top to bottom.

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3. The apparatus of claim 2 wherein:

the frame is formed of an integral piece of molded plastic material.

4. The apparatus of claim 1 wherein:

the net is formed of a nylon material.

5. The apparatus of claim 1 wherein:

the frame is formed of a molded plastic material.

6. A disposable netting assembly for a system for trapping floatable debris comprising:

a knitted mesh net having a mouth at one end surrounded by a rim;

a frame;

the net being secured around its mouth to the frame; and

5 the net being formed of an inner layer and an outer layer, each layer being formed of
a mesh having openings therein, the openings of the inner layer being substantially larger
than the openings of the outer layer.

7. The apparatus of claim 6 wherein:

the net is formed of a high strength and high stretch yarn, with rolled sewn seams and having reinforcing on the seams and on high stress areas of the net.

8. The apparatus of claim 6 wherein:

the frame having an upstream side and a downstream side, an inside and an outside, and being formed of a plastic material of four members including a top member, a bottom member and two side members, the outside of the side members being tapered inwardly
5 front-to-back and the upstream-downstream sides converging from top to bottom, the frame having at least one clamping element and a plurality of projections extending either from the frame or the clamping element, the net being secured to the frame with the rim thereof extending over the projections between the clamping element and the frame and around the upstream side of the frame.

9. The apparatus of claim 6 wherein:

the frame having an upstream side and a downstream side, an inside and an outside, and being formed of a plastic material of four members including a top member, a bottom member and two side members, the outside of the side members being tapered inwardly
5 front-to-back and the upstream-downstream sides converging from top to bottom.

10. The apparatus of claim 6 wherein:

the frame having an upstream side and a downstream side, an inside and an outside, and being formed of a plastic material of four members including a top member, a bottom member and two side members, the outside of the side members being tapered inwardly front-to-back and the upstream-downstream sides converging from top to bottom.

11. The apparatus of claim 6 wherein:

the frame having an upstream side and a downstream side, an inside and an outside, and being formed of a plastic material of four members including a top member, a bottom member and two side members, the outside of the side members being tapered inwardly front-to-back and the upstream-downstream sides converging from top to bottom, the frame having at least one clamping element and a plurality of projections extending either from the frame or the clamping element, the net being secured to the frame with the rim thereof extending over the projections between the clamping element and the frame and around the upstream side of the frame.

12. The apparatus of claim 6 wherein:

the openings in the inner layer having an area that is at least four times as large as the openings of the outer layer.

13. The apparatus of claim 6 wherein:

the openings in the inner layer having an area that is at least ten times as large as the area of the openings of the outer layer.

14. The apparatus of claim 6 wherein:

the outer layer of the net having a volume that is substantially larger than the volume of the inner layer.

15. The apparatus of claim 6 wherein:

the outer layer of the net having a volume that is at least approximately twenty-five percent larger than the volume of the inner layer.

16. The apparatus of claim 6 wherein:

the rim of the outer layer of the net is attached to the frame so as to be spaced outwardly from the rim of the inner layer.

17. A disposable net assembly for a removal system for floating debris comprising:

a knitted mesh net having a mouth at one end;

a frame surrounding the mouth of the net, the frame having an upstream side and a downstream side, an inside and an outside;

5 the frame being formed of four members including a top member, a bottom member and two side members;

the frame having at least one clamping element and a plurality of projections extending either from the frame or the clamping element, the net being secured to the frame with the rim thereof extending over the projections between the clamping element and the

10 frame and around the upstream side of the frame.

18. The apparatus of claim 17 wherein:

the frame is formed of a plastic material of four straight members including a top member, a bottom member and two side members, each member having a plurality of holes therein;

5 the net is secured around its rim to the frame, with the mouth thereof extending from the downstream side thereof, around the outside of the frame, around the upstream side of the frame and over the plurality of holes; and

the frame has at least one clamping element thereof having a plurality of posts projecting therefrom, said clamping element being secured to the members with the posts
10 snapped into the holes and clamping the mouth of the net to the frame.

19. The apparatus of claim 17 wherein:

the side members of the frame are inwardly tapered in the downstream direction and wider, in the upstream-to-downstream direction, at the top than at the bottom.

20. The apparatus of claim 17 wherein:

the at least one clamping element includes a set of four straight plates, each having posts projecting therefrom;

the holes are on the inside of the members; and

5 the plates clamp the mouth of the net to the frame along the inside of the members.

21. The apparatus of claim 17 wherein:

the at least one clamping element includes a rectangular frame clamping portion having the posts thereon; the holes in the frame and the posts in the frame clamping portion facing in one of the upstream or downstream directions and clamps the mouth of the net therebetween.

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22. The apparatus of claim 17 wherein:

the projections extend outwardly from the outside of the frame and the clamping element is a tension band extending around the frame with the mouth of the net and the projections between the band and the frame.

23. The apparatus of claim 17 wherein:

the projections extend outwardly from a groove around the outside of the frame and the clamping element is a tension band extending around the groove with the mouth of the net and the projections between the band and the frame.

24. The apparatus of claim 17 wherein:

the net is formed of a high strength and high stretch yarn, with rolled sewn seams and having reinforcing on the seams and on high stress areas of the net.

25. The apparatus of claim 17 wherein:

the frame having an upstream side and a downstream side, an inside and an outside,
and being formed of four members including a top member, a bottom member and two side
members, the outside of the side members being tapered inwardly front-to-back and the
upstream-downstream sides converging from top to bottom.

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26. A disposable netting assembly for a floatable debris trap useful in a combined sewer overflow, comprising:

a knitted mesh net having a mouth at one end surrounded by a rim;

a frame;

5 the net being secured around its mouth to the frame; and

the net being formed of a high strength and high stretch yarn, with rolled sewn seams.

27. The apparatus of claim **25** wherein:

the net has reinforcing on the seams and on high stress areas of thereof.

28. The apparatus of claim **25** wherein:

the yarn is sufficiently elastic, either due to composition or the way in which it is knitted, to allow the net to deform when clogged with debris and thereby expand to allow flow paths around the trapped debris, thereby reducing pressure drop across the net.

29. The apparatus of claim **25** wherein:

the material is a knotless knit pattern of nylon material selected for its minimal effect on the breaking strength of the material.

30. The apparatus of claim **25** wherein:

the frame having an upstream side and a downstream side, an inside and an outside, and being formed of a plastic material of four members including a top member, a bottom member and two side members, the outside of the side members being tapered inwardly front-to-back and the upstream-downstream sides converging from top to bottom.

31. The apparatus of claim **25** wherein:

the frame has an upstream side and a downstream side, an inside and an outside and is formed of a plastic material of four straight members including a top member, a bottom member and two side members, each member having a plurality of holes therein, the net
5 being secured around its rim to the frame, with the mouth thereof extending from the downstream side thereof, around the outside of the frame, around the upstream side of the frame and over the plurality of holes; and the frame having at least one clamping element thereof having a plurality of posts projecting therefrom, said clamping element being secured to the members with the posts snapped into the holes and clamping the rim of the net to the
10 frame.